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ABSTRACT

Recent developments in computer and multimedia technologies bring about the need to reconsider the education of today's teachers and future teachers and to update the technology-related content of literacy education coursework. "Application" software receives the most attention from researchers and theorists in literacy education. Use of application software in the classroom was highlighted in a variety of ways in a Microcomputers in Reading and Language Arts course. A new development pertinent to literacy education is the development of the "electronic book" (also called "interactive text"). Increased memory and processing capabilities for hardware has made possible the widespread use of digitized voice synthesis. Students in the course used both phonemic and digitized voice synthesis software. Another development is the introduction of interactive multimedia materials, which combine the capabilities of computers with such multimedia devices as CD-ROM and videodiscs. Students were consistently impressed with the entertainment value of "edutainment" software, but extremely dubious about their classroom usefulness. Students completed anonymous course evaluations at the end of the course. Students were pleased with continuous evaluation of the work, extensive exposure to software, instructor enthusiasm about computers, and the preparation of portfolios containing their work. They were less enthusiastic about "tangents" relating computer-based instruction to other educational issues, too brief instructor responses in dialogue journals, and the amount of time devoted to writing process groups. (Contains 12 references and 23 software references. Appendixes present the course syllabus, software evaluation form, small group assignments, and the final examination question.) (RS)

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ED 396 274

Preparation of Teachers for Computer and Multimedia-Based Instruction in Literacy

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Paper presented at the College Reading Association, November, 1995, Clearwater, FL

Recent developments in computer and multimedia technologies have greatly changed the format and content of materials available to the computer-using teacher of literacy. These changes bring about the need to reconsider the education of today's teachers and future teachers and to update the technology-related content of literacy education coursework.

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The purpose of this paper is to consider a variety of issues related to updating the technology curriculum of undergraduate and graduate courses in literacy education.

Attention to this issue is needed now more than ever, as computers become more a part of the everyday life of the classroom. Recent data from New York State, one of the leading states in funding educational technology, suggest that 72% of students and 50% of teachers now use computers regularly (New York State Public Schools, 1994).

Attention to the preparation of literacy teachers for use of computer technology in the classroom gained momentum in the early 1980's with the formation of the International Reading Association's Special Interest Group for Microcomputers in Reading and with ad hoc microcomputer committees being formed in many local, state and national reading associations. In 1985, at the College Reading Association's Annual Conference in Pittsburgh, a symposium was presented that brought together a variety of reading educators who were teaching specialized courses that prepared teachers to use computers to teach reading and writing.

Most of the material presently available to deal with the specialized issues of computer technology and literacy dates from this same period. The papers presented at the 1985 symposium, as well as additional helpful materials for teaching such courses, were collected and published

(Balajthy, 1986). The major textbooks for use in these specialized courses were produced in the mid- and late 1980's (e.g., Author, 1986, 1989; Blanchard, Mason & Daniel, 1987; Ewing, 1984; Geoffrion & Geoffrion, 1983; Reinking, 1987; Strickland, Feeley & Wepner, 1987).

The field of computer technology is notoriously fast-changing, and it might be expected that ideas and materials presented and discussed five to ten years ago might be outdated and in need of reconsideration. However, an additional factor has made detailed reconsideration of this issue even more imperative, namely, the move of Apple Computer Corporation and the public schools from the old Apple II platform to the Macintosh platform, with its related multimedia technologies.

Major changes brought about in the mid-1990's which most dramatically affect literacy education include the following (Balajthy, 1996):

a) Decline of interest in direct instructional software within the field of literacy education, and simultaneous growth of interest in "application" software more amenable to developmental educational philosophies

b) Development and popularization of the "electronic book"

c) Increased memory capabilities of computers, allowing use of high-quality phonemic voice synthesis in place of the older robotic-sounding digitized voice synthesis

d) Integrated multimedia packages based on CD-ROM and/or videodisc technologies

e) Vastly increased availability of computers in homes

This paper deals with each of these in turn, focusing on the practical implications for teacher preparation programs. Each topic is discussed in the context of recent changes in content and structure of the author's graduate course in Microcomputers in Reading and Language Arts.

Major Changes Affecting Technology Education

Interest in computer as tutee, or programming, has declined in recent years as educators have questioned both the wisdom of devoting large blocks of classroom time to teaching programming and the importance of programming ability to most vocations. Teachers have also been skeptical about the transfer of problem-solving skills from programming to other domains such as reading and writing.

Application software

Computer-assisted instructional software, use of the computer as a tutor, is the most widely available type of software. However, it is the third type of software, tool (or "application") software, that today receives the most attention from researchers and theorists in literacy education. In part, deemphasis on tutor software in literacy education has

come about because of increased recognition of the importance of process education, that students learn by doing. Tool software can help teachers committed to wholistic education to engage students in writing and reading their own stories and in other authentic literacy activities.

Teachers may be more amenable to having their children use application software in class because they themselves are using such software more and more. Doctorow (1994), for example, found that teachers are increasingly using computers to keep track of student progress.

Use of application software in the classroom was highlighted in a variety of ways in the Microcomputers in Reading and Language Arts course. Students were introduced to telecommunications with a demonstration of the multimedia networking program Netscape, touring several Internet sites, such as the Museum of Paleontology and the White House. A special speaker addressed the class on the topic of using telecommunications software and e-mail to encourage classroom writing.

Students studied and discussed hypermedia creation software. They worked through a demonstration disk of HyperStudio and examined several HyperStudio projects created by fifth graders. The class as a whole was led through an exercise in creating a HyperCard stack, including scanning of pictures for pasting into the stack.

Students also used Children's Writing and Publishing Center to

create classroom newspapers and Crossword Magic to create crossword puzzles. They learned the ClarisWorks word processor and database and studied classroom applications of each.

Electronic books

An exciting new development pertinent to literacy education is the development of the "electronic book" (also called "interactive text"). Electronic books take many forms, depending on their purpose. One type, designed for literacy experiences of beginning and at-risk readers, simulates reading aloud to children. Screen pages and illustrations are presented on the monitor. Children may access voice synthesized pronunciations and definitions (and even translations into Spanish) by pointing the cursor at unrecognized words and pressing a key. Some previous research indicates that this latter capability of software is especially appreciated by students (Ruberg, 1993).

Students were introduced to electronic books in a course segment designed to illustrate major changes in classroom technology over the past 10 years. They first examined an Apple IIe series of electronic storybooks, Houghton Mifflin's Reading Comprehension. They then examined early Macintosh CD-ROM books by Discis, Peter Rabbit and Benjamin Bunny. Finally they examined the recently published Living Books series by Broderbund, including Just Grandma and Me, and Arthur's Teacher Trouble, as well as Putnam/NewMedia's Anthony's Big Magic.

Voice synthesis

Increased memory and processing capabilities for hardware has made possible the widespread use of digitized voice synthesis, which allows production by computers of clearly understood human-sounding voice. Older technologies usually depended solely upon print or graphics, with occasional use of robotic-sounding phonemic voice synthesis.

Voice recognition by computers is still at a primitive developmental stage, but it will be increasingly available. The Optimum Resource Reading Program provides a series of drills based on letter cluster linguistic phonics elements in words. Students wear headphones with attached microphones into which they can speak answers. A letter cluster appears on the screen, such as "li", and the student is asked to say its sound. The computer then analyzes the voice input to determine whether the answer was correct.

Students in the course used both phonemic and digitized voice synthesis software. Houghton Mifflin Reading Comprehension, for example, and KidWorks 2 employ phonemic synthesis, the former to allow unfamiliar words in a story to be pronounced and the latter to read aloud student-written compositions. The CD-ROM electronic books used digitized synthesis extensively. KidWorks 2 also has a component that allow children to read their own compositions aloud into a microphone. The readings are digitized, stored on disk, and can be played back at later

times.

Interactive multimedia

Another fascinating development is the introduction of interactive multimedia materials, which combine the capabilities of computers with such multimedia devices as CD-ROM and videodiscs. In the Martin Luther King, Jr. interactive multimedia package, for example, students used a workstation equipped with a videodisc player and monitor connected by cable to a computer. The computer provides a large amount of print information, such as the verbatim speeches of King, summaries of news events from his life, a time line of important events, a glossary, and digitized photographs. Students also used the computer to control the videodisc player, clicking on icons to access still pictures or videos of television news clips and of King's speeches.

Students also used CD-ROM-based software in class software presentations, including Coral Kingdom and Microsoft Dinosaurs.

Educational vs. "edutainment" software

Computers are available in almost 50% of American homes. Many of these computers sit idle, but increasingly parents whose jobs call for frequent use of computer technology are buying and using computers for home tasks. Their interest in using these computers as educational tools for their children has led to unexpected developments. First, since most businesses use hardware developed by or compatible with IBM formats

(such as MS-DOS or Windows), parents tend to buy hardware of that variety. This has led software developers to tremendously increase their attention to educational software that fits those formats, a change from the 1980's when almost all software for children was designed for Apple Computer Corporation machines, the Apple II-series and Macintosh. Second, parents are less concerned with on-task learning behaviors in their software purchases than would be most teachers. This has led to development of "edutainment" software, software that combines high entertainment value with educational objectives. In many cases, the "edu" part of the software plays a decidedly minor role in comparison to the "tainment." Third, parents want a broader payback for their money than schools demand. A school might be willing to spend $50 for a piece of software that will be used with 30 students each year over a several year period to practice one activity. In order to attract home buyers who only have one or two children to spend that same $50, software publishers realize that they have to provide a variety of high interest activities. This has led to multiple-activity software such as the 5-disk The Backyard, which offers 6 major games relating to science, mapping skills, and animal habitats, as well as a host of minor activities.

The relationship of entertainment and education in software is a controversial one. Understandably, students like software that presents games, such as that which rewards good scores on a drill with a game

(Ruberg, 1993).

The issue of "edutainment" versus education was frequently discussed in class. The issue arose most frequently in conjunction with the Broderbund series for preschoolers that includes The Playroom and The Backyard, as well as the Broderbund Living Books series of electronic storybooks. Students were consistently impressed with the entertainment value of such software, but extremely dubious about their classroom usefulness. They sympathized with Hirschkron (1995), a reviewer who formulated three cardinal rules for successful edutainment software: "Include animals, make funny noises, and squash as many objects as possible" (p. 83):

> I asked if the kids thought [edutainment software] taught them anything. One of my [child] reviewers assured me that it did. 'What?' I asked. He thought for a minute and answered, 'How to have fun.'
>
> As if they need help.

Course Evaluation

Negative Aspects

1. The student software presentations worked out well for the class size of 14, but too much time would have been needed for a larger class

size. Perhaps in a larger class, students could work in groups to present software.

2. Some software evaluation categories in the syllabus (e.g., Word Recognition) offered too large a selection of software, which added to student confusion. Having students choose from a more limited selection, of higher quality, would be more efficient.

3. The one presenter from outside the class was very well received. Inviting more outside speakers to visit the class would offer advantages.

4. Not all software for the evaluations was available on the first day of class, creating some confusion. The software should be set up and available from the beginning of the course.

Positive Aspects

1. The front-loading of presentations on hardware operation was effective, increasing student independence as they began homework assignments.

2. Students enjoyed the large amount of small group work. One student was able to help another if their work bogged down due to hardware or software confusion.

3. The response journal writing helped students think through the various class projects, and also aided in helping the instructor understand students' thinking.

4. Students reported that a lot of Apple II machines are still in operation in schools. Use of both the Macintosh and Apple II platforms in the class seems to continue to be useful.

5. Use of demonstration disks and demonstration videotapes, provided free or inexpensively by publishers, was cost-efficient.

6. The hands-on experience with children was one of the most valuable parts of the course. Journal responses were particularly valuable for this activity.

7. The group development of a final exam question was taken seriously. Students did fine work in personalizing the question to their own contexts. One student in her final exam summarized her past approaches to use of computers as basically using games as time fillers. "I realize I was very naive with my approach to computers in the classroom and especially to what they can do with learning disabled students." Another responded, "I realize that just as using portfolios and learning centers requires a great deal of planning and careful management, so does use of technology."

Student Evaluations

Students completed anonymous course evaluations at the end of the course. The evaluations emphasized that students were particular pleased

with:

1) Continuous evaluation of the work

2) Extensive exposure to software

3) Instructor enthusiasm about computers

4) The preparation of portfolios containing their work

5) Instructor patience with students having problems with computer operation--"always monitoring and asking if help needed."

They were less enthusiastic about:

1) "Tangents" relating computer-based instruction to other reading education issues, such as whole language or phonics instruction. Perhaps students felt they had sufficient exposure to these issues in other courses.

2) Instructor responses in dialogue journals were too brief and did not always respond to the most important concerns of the student.

3) The amount of time devoted to Writing Process Groups, working on research papers, turned out to be very limited. Students would have liked to share their work with others.

Appendix A. Course syllabus

EDUC 479--Microcomputers in Reading and Language Arts
Summer Session III, 1995 **School of Education**
Dr. Ernest Balajthy **SUNY-Geneseo**

Course Description

Microcomputers in Reading and Language Arts is designed to prepare classroom teachers and teachers of reading to use computers and related technology for development of literacy abilities. The course provides an overview of technology applications related to reading and writing development. Several such applications are covered in depth, including: Hypermedia creation software, electronic books, technology-rich integrated thematic units, and computer-based assessment.

No prior knowledge of computing is required. The course provides modules of basic instruction in how to operate Macintosh and Apple IIGS microcomputers, for students new to computing. More advanced students will skip these modules and work in class on independent and small group assignments.

Much class time is spent in independent and small group learning. Most of the software is available in only single copies, so different students and groups often will be completing different assignments at the same time.

Text

Lab fee: $10.00 (no checks, please; a receipt will be issued)--for lab expenses

Balajthy, E. (1989). Computers in Reading: Lessons from the Past and the Technologies of the Future. Englewood Cliffs, NJ: Prentice Hall. (Available at Sundance Books)

Related shorter readings

Students should invest in both double-density and high-density 3 1/2 inch diskettes. Only DD diskettes are usable in St. 205.

Office

Blake C-107
Hours: Before and after class, or by appointment
Phone: (h)473-0330
(o) 245-5558

Schedule

Week 1
Mon, 7/31

Introduction to Course
Overview of Computer Technology Applications in Reading/Language Arts
Operation of Apple IIGS and Macintosh
--->First meeting of Consensus Groups; daily meetings will take place for remainder of first-half of course to discuss course content and readings

Tue, 8/1

Electronic Books

--->Initial Meeting of Writing Process Cooperative Groups for prewriting work on research/methods papers; daily meetings will take place for remainder of course
Balajthy, ch. 7 & 8: "Computers and Learning from Text" and "Voice Synthesis"

Wed, 8/2
Technology-rich Integrated Thematic Units
Dialogue Journal Collection
Balajthy, ch. 1: "Using Computers to Integrate Reading and Writing"

Thur, Fri, 8/3,4
Assessment
Research
Balajthy, ch. 4, 5, & 6: "Diagnosis and Prescription", "An Overview of Research", and "Special Topics of Research Interest"

Week 2

Mon, 8/7
HyperCard and Hypermedia Creation Software

Tue, 8/8
Supervised Independent and Small Group Work
Lab open for children's visits
Porfolio (first half) Collection

Wed, 8/9
Supervised Independent and Small Group Work
Lab open for children's visits
--->First meeting of 2nd-Half Consensus Groups; time to be arranged by groups
Dialogue Journal Collection

Thur, Fri, 8/10,11
Supervised Independent and Small Group Work
Lab open for children's visits

Week 3

Mon, 8/14
Topics & Student Reports: Emergent Literacy & Early Reading
Topics & Student Reports: Multimedia
--->Creation of Final Exam question by class
Balajthy, ch. 8 & 9: "Interactive Video"

Tue, 8/15
Telecommunications: Dr. Marion Fey, SUNY-Geneseo
Topics & Student Reports: Story Creation/Language Experience Software
Balajthy, ch. 10: "Special Hardware-Related Topics"

Wed, 8/16

Topics & Student Reports: CAI (Tutorials/Drill and Practice/Simulations)
Dialogue Journal Collection
Balajthy, ch. 2, 3 & 11: "Secondary and College Instruction in Reading", "Integrated Reading Curricula", and "Natural Language"

Thur, Fri, 8/17, 18

Topics & Student Reports: Any remaining presentations, if necessary
Final Exam Writing Session: Summative Overview of the Course

Assignments

Research/Application Article: (Required for grade of "A")

Students who opt not to complete this option will be eligible for "B" as the highest grade. The paper may be written individually or in pairs. This paper should be of publication quality for possible submission to a journal such as The Reading Teacher. Writing will be carried out in Writing Process Cooperative Groups, following general guidelines of the Writing Process approac The decision to complete this project must be made early in the course (though you may change your topic or opt out of the project at any time).

The paper will focus on a specific aspect of computer use in reading and language arts. It will review prior publications on the topic, and examine existing software available. The article will conclude with some guidelines for applying the topic in the classroom.

Dialogue Journal

This journal will be collected every Wednesday. Bring it to class each day. Contents should include your own responses to course content. Some topics will be assigned. Most will be left up to you. Also, see below under "Children's Hands-on Experience".

Children's Hands-On Experience

Perhaps the most revealing insights about technology in education can be made when you are working one-on-one with a child at the computer. Days in the course listed above have been set aside for you to arrange to bring a child into the computer lab. You may set your own time for the visit, but sign out any necessary software or hardware in advance with the professor to insure its availability. You may come and go with the child as necessary. No topics will be covered by the professor during these days. When not with children, you may work on independent or small group work. You may also meet in Writing Process or Consensus groups to work on assignments, depending on their ability to schedule such meetings.

Your session with the child should be well-planned in advance to meet your purposes. Bear in mind the attention span (or lack thereof) of the child, so be flexible. Snacks and juice will be provided by volunteer students each day. Write up a detailed description of the experience and your reaction to it in your dialogue journal. You might want to tape record the session to stimulate your memory.

Students with computers at home may choose to use them with children. Some software may be signed out for overnight use.

Portfolio

Halfway through the course and at the end of the course, you will submit a portfolio of your work. The portfolio should be clearly organized. It should have a "Table of Contents." The portfolio may include such items as:

- Class notes and notes from readings--A "Cornell Notetaking System" is suggested, that allows room for your personal reactions
- Software evaluations
- Printouts
- Summaries/critiques of articles from the suggested readings or other course-related articles
- Lesson ideas
- Other suggestions:

Portfolio Evaluation
EDUC 479-Microcomputers in Reading and Language Arts

Name _____

Class notes	0	1	2	3
Readings	0	1	2	3
Journal	0	1	2	3
Print-outs	0	1	2	3
Software Evaluations	0	1	2	3

Software Presentations

Each student will professionally present a piece of software or multimedia. The presentations have three purposes: To demonstrate operation of the software to students (This is the largest part of the presentation.), to briefly critique its operation, and to briefly discuss its possible use in class. A one-page handout is required, that will provide information about the program and its operation and use in classrooms, so that we need take few notes during the presentation.

The instructor will provide a list of software from which to choose. Most of the software will be fairly complex, requiring too much study for hands-on use by the whole class. If you have access to software at home or at work or from friends that the class would otherwise not see during the course, please volunteer to demonstrate it rather than choosing from the instructor's list.

Grading criteria:

Knowledge of software	1 2 3 4 5
Quality of speaking	1 2 3 4 5
Organization of presentation	1 2 3 4 5
Critique/Classroom applications	1 2 3 4 5
Handout	1 2 3 4 5

Final Exam Summative Writing Exercise

The final exam will serve as an opportunity to put the course into perspective. At the beginning of the third week, the class and instructor will formulate a summative question that addresses course content on an overview basis. On the Final Exam day, students will be given extensive time to write their answers to the question. Books, articles, notes and an outline will be allowed, but students may not bring a rough draft to class.

Course Grading Criteria:

Research/Application Article	11%
Dialogue Journal	15%
Portfolio	54%
Software Presentation	10%
Class Participation	10%

Version 11-14-94

Software Evaluation Form
School of Education, SUNY-Geneseo

Title of Program _____

Skill Objective(s) _____

_____

Publisher & Address _____

Educational Value	1	2	3	_____
Motivational Value	1	2	3	_____
Match to Typical Classroom Curriculum	1	2	3	_____
Ease of Use	1	2	3	_____
Individualization	1	2	3	_____
Potential for Cooperative Learning	1	2	3	_____
Student Control	1	2	3	_____
Quality of Feedback	1	2	3	_____
Graphics/Sound	1	2	3	_____
Documentation Value	1	2	3	_____
Recordkeeping/Management System	1	2	3	_____

DESCRIPTION OF OPERATION

EVALUATION & IDEAS FOR CLASSROOM USE

Appendix 1: Independent/Small Group Assignments
Note: Additional assignments will be made during the course.

Hardware/Key Software
Note--Complete this section early in the course.

Required: Study and take notes on Macintosh Basics (installed on each Mac in St. 205)

Required: Study the basics of word processing and database creation using ClarisWorks.
This program is installed on all Macs with hard drives on campus.
Documentation is posted in folders at the rear of St. 205.

Emergent Literacy/ Beginning Reading

Required: Print out a chant story using Student Stories (IIGS, St. 205 glass cabinet), with the names of your own students. Create a master copy of a students' book using lines from the printout, that your students could illustrate. See instructor for examples.

Required: Print out a rebus story using Muppet Slate (St. 205 glass cabinet, IIGS) and the Muppet Learning Keys (available from instructor)keyboard for young children.

Required: Use Teddy Bearrels of Fun (available from instructor, IIGS) to create and print out in color a picture with words. Consider how these programs might be used in language experience activities.

Required: Respond in your dialogue journal to the various sections of the Reader Rabbit curricula, bearing in mind your own philosophy of beginning reading. A demo CD-ROM is available from the instructor for use on color Macs.

Required: KidWorks 2 assignment, as per instructor announcement:

Required: Kid Pix assignment, as per instructor announcement:

Required: Complete a detailed evaluation of Bailey's Book House (available from instructor to be installed on color Mac)

Required: Use Spooky, Kooky Monster Maker to print out item that you create, with both graphics and story (available from instructor to be installed on a Mac)

Required: Complete an Evaluation Sheet for 2 of:
Alphabots (St 205 glass cabinet)
Betabots (St 205 glass cabinet)

Word Recognition

Required: Complete an evaluation sheet for Word Munchers (IIGS, St. 205 glass cabinet), one of the most popular selling programs on the market today

Required: Complete an evaluation sheet for two of:
Syll-A-Search (use with Apple IIGS equipped with Echo voice synthesizer) (St 205 glass cabinet)
Construct-A-Word (use with Apple IIGS equipped with Echo voice synthesizer) (St 205 glass cabinet)
Hint and Hunt (use with Apple IIGS equipped with Echo voice synthesizer) (St 205 glass cabinet)
Phonics Prime Time: Consonants (St 205 glass cabinet)
Phonics Prime Time: [Any Subtitle] (St. 205 glass cabinet)
Words at Work: [Any Subtitle] (St. 205 glass cabinet)

Sound Ideas: Word Attack (use with Apple IIGS equipped with Echo voice synthesizer) (St)

Those Amazing Reading Machines: [Any Subtitle] (St. 205 glass cabinet)

Vocabulary

Required: Complete an evaluation sheet for Word Attackl, one of the best selling vocabulary programs on the market. Bear in mind that teachers can insert their own words and sentences into the program. (St. 205 glass cabinet)

Required: Create a crossword puzzle using Crossword Magic (IIGS; St. 205 glass cabinet)

Comprehension: Subskill

Required: Read a story from Comprehension Connection (St 205 glass cabinet). Complete an evaluation form in the light of whole language criteria and your knowledge of metacognitive development. Read the explanation of metacognition in the documentation.

Electronic Books

Required: Write out evaluation sheets for 2 stories chosen from different levels of Houghton Mifflin's Reading Comprehension (St 205 glass cabinet; Use IIGS with voice synthesizer), a voice synthesis comprehension program. Evaluate in the light of whole language criteria.

Required: Create a booklet of color printouts from Explore-A-Story: Lima Bean Dream or Explore-A-Story: Baldheaded Duck (IIGS; St 205 glass cabinet).

Required: Complete an evaluation form for:

Just Grandma and Me OR Arthur's Teacher Trouble (available from instructor; color Macs)--an example of Broderbund's CD-ROM "Living Books" series

Benjamin Bunny (available from Fraser librarian on CD-ROM; use color Macs in Fraser library rather than the Power Macs in Fr. 116)--an example of Discus Books series

Content Area Literacy/Study Skills

Required: Play Where in the World is Carmen Sandiego? (Installed on Mac in St. 205). Consider in your dialogue journal how you might use this interactive game to enrich social studies learning and literacy. This is a very popular game, and has recently spawned a PBS TV show.

Required: Create a short science or social studies database using ClarisWorks. Print it out and submit.

Required: Print out a time line using TimeLiner (installed on Mac in St. 205)

Required: Submit Software Evaluation for for 2 of following:

Any content area software installed on Macs in St. 205

Oregon Trail (a detailed demo is available on the KidSoft CD-ROM, available from the instructor)

Word Processing/Writing Process

Required: Choose an example of your past writing to type into a ClarisWorks file. Then use a grammar checker (see instructor) to analyze grammar and style.

Required: Write a 1-page review of one activity from Write Connection (e.g., the movie review activity, the descriptive paragraph activity, etc.)(St. 205 glass cabinet, IIGS) Follow the activity through Write Connection's prewriting, during writing, and postwriting aids.

Required: Write 3 poems using Poetry Express (IIGS; St. 205 glass cabinet)

Required: Create a two-page newspaper using Children's Writing and Publishing Center (IIGS; available from instructor; docs in St. 205 glass cabinet), the leading classroom desktop publishing program on the market.

Writing--Subskill

Required: Complete Software Evaluations for 2 of:

Grammar Gremlins (St. 205 glass cabinet)

Spelling

Required: Complete software evaluations for 2 of:

Spell It! (St. 205 glass cabinet)

Utilities

Required: Create a crossword puzzle using CrossWord Magic (for IIGS; in glass cabinet of St. 205)

Desktop Publishing

Required: Create and print out 2 items from Print Shop (installed on Mac in St. 205)

Typing/Keyboarding

Complete software evaluation forms for 2 of:

Betabots (St. 205 glass cabinet)

Assessment/Diagnosis

Multimedia

Required: Respond in your dialogue journal to the Demo Disk (DO NOT run on Power Macs in Fr. 116; use color Macs in Fraser Library) of HyperStudio as per its potential for writing process.

Required: Create a 5-card stack using HyperCard on some education-related topic. This should include scanned items. The program will be introduced during class, and significant supervised class time will be devoted to your work on this project.

Appendix 2: Software/Hardware Presentations

ERIC CD-ROM disk (located in Milne Library--schedule a class visit with the instructor)

Fahrenheit 451 (available from instructor)

Hitchhiker's Guide to the Galaxy (available from instructor)

ClarisWorks Works Spreadsheet (installed on all Macs on campus)

Telecommunications using various Geneseo facilities (more than one student)

Martin Luther King Jr. Interactive Videodisc (available from librarian at Milne; use on Macintosh LC multimedia station located near ERIC collection at Milne)

Appendix B: Final Examination Question

The Final Examination

"To log on or not to log on. That is the question. Describe the context of your answer:

a) your acutal grade and/or subject

b) your future expected grade and/or subject

c) someone else's future grade and/or subject.

Then address the issue of whether computer technology should be implemented in the context. Substantiate your answer with specific examples of hardware/software applications you've used or seen in class. Make significant reference to the class content and readings.

References

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Arthur's Teacher Trouble, Broderbund Software, P.O. Box 6125, Novato, CA 94948, 415-382-4700

The Backyard, Broderbund Software

Benjamin Bunny, Discis Books

Children's Writing and Publishing Center, The Learning Company, 6493 Kaiser Dr., Fremont, CA 94555, 800-852-2255

ClarisWorks, Claris Corporation, 5201 Patrick Henry Drive, Santa Clara, CA 95052

Crossword Magic, Mindscape, 1345 Diversey Parkway, Chicago, IL 60614

Houghton Mifflin Reading Comprehension

Hypercard, Claris Corporation, 5201 Patrick Henry Dr., Santa Clara, CA 95052

HyperStudio, Roger Wagner Publishing, 1-800-421-6526

Just Grandma and Me, Broderbund Software, P.O. Box 6125, Novato, CA 94948, 415-382-4700

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Kid Works 2, Davidson & Associates, P.O. Box 2961, Torrance, CA 90509

Martin Luther King, Jr. , ABC News Interactive Videodiscs, Optical Data Corporation, 30 Technology Drive, Box 4919, Warren, NJ 07060, 201-668-0022

Netscape

Optimum Resource Reading, Optimum Resource, 10 Station Place, Norfolk, CT 06058, 800-327-1473

Oregon Trail, MECC, 6160 Summit Drive North, Minneapolis, MN 55430

Peter Rabbit, Discis Books

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Scholastic's Electronic Portfolio, Scholastic Software, PO Box 7501,

Spell It, Davidson & Associates, Inc., P.O. Box 2961, Torrance, CA 90509, 800-545-7677

Voyage of the Mimi and Voyage of the Mimi II, Sunburst/Wings for Learning, 101 Casteton Street, P.O. Box 100, Pleasantville, NY 10570,

Word Munchers, MECC, 6160 Summit Drive North, Minneapolis, MN 55430

The Writing Center, Learning Company, 6493 Kaiser Dr., Fremont, CA 94555, 800-852-2255